INTERLOCAL COOPERATION ACT AGREEMENT LOWER PLATTE CUMULATIVE IMPACT STUDY AMENDMENT 1

This "Amendment 1" (hereinafter referred to as "Amendment 1") to the original Interlocal Cooperation Act Agreement (hereinafter referred to as "Agreement") dated 14 day of April 2003, is for the purpose of expanding the original list of Partners to the Agreement. Original and new Partners are listed below are hereinafter referred to collectively as "Partners"

Original Agreement Partners:

Lower Platte North Natural Resources District (LPNNRD) Lower Platte South Natural Resources District (LPSNRD) Papio-Missouri River NRD (PMRNRD) Nebraska Game and Parks Commission (NGPC) Nebraska Department of Natural Resources (NDNR) Nebraska Department of Roads (NDOR)

New Agreement Partners:

Lower Platte River Corridor Alliance (LPRCA)

Nebraska Land Trust (NLT)

United States Geological Survey (USGS)

United States Fish & Wildlife Service (USF&WS)

University of Nebraska (UNL)

Center for Advanced Land Management Information Technologies (CALMIT)

Metropolitan Utilities District (MUD)

Lincoln Water Systems (LWS)

Where as:

The Partners agree that the Platte River has experienced many changes over the years due to development in and adjacent to the flood plain. Inventories of various development or modifications associated with these changes have been addressed in specific reports generated by multiple agencies and stakeholders within the basin, however this information has not been combined to determine cumulative effects of these changes.

The Nebraska Game and Parks Commission (NGPC) and the U.S. Fish and Wildlife Service (USFWS) initiated the idea for forming a committee to develop and execute a study to determine the cumulative effects of impacts along the Lower Platte River.

The original Partners joined together with the United States Army Corps of Engineers (USACE) to complete a Phase I scoping study (Addendum "A" to the Agreement) to study the cumulative effect or changes to the Lower Platte River.

All original and new Partners listed above desire to join together and cooperate on future efforts by being a part of the original Agreement, and work with each other toward obtaining data and information for inputting into a Geographic Information

River Cumulative Impact St	Interlocal Cooperation Act Agreement for the Lower Platte ady is executed by the Lower Platte North Natural B day of <u>August</u> , 2005.
Lower 1	Platte North Natural Resources District
Ву:	Und Johannes
Title:_	CHAIRMAN
Designated Contact Person:	TOM MOUNTERED
Mailing Address:	PO BOX # 126 WAHOD, NE 68006
Telephone Number:	(402) 443-4675

This Amendment "1" to the Interlocal Cooperation Act Agreement for the Lo	
Cumulative Impact Study is executed by the Papio-Missouri River Natural Re	esources District on
this <u>alst</u> day of <u>feel</u> , 2005. Papio-Missouri River Natural Resources District	:
By: At 1 Oltan	
Title: GENTEAL MANAGER	
Designated Contact Person: Gevry Bowen	
Mailing Address: 8901 5.154th St., Onacha, NE-	68138
T-1-hans Number 402 - 4-14. 6222	

This Amendment "1" to the Interlocal Cooperation Act Agreement for the Lower Platte River Cumulative Impact Study is executed by the Nebraska Department of Natural Resources on this Z9_day of \(\sqrt{\text{UV}} \) \(\sqrt{\text{Nebraska Department of Natural Resources}} \)

Nebraska Department of Natural Resources

By: \(\text{Decartment of Natural Resources} \)

Title: \(\text{Decartment of Natu

Cumulative Impact Study is executed by the Lower Platte River Corridor Alliance on this day of
Lower Platte River Corridor Alliance
Lower Platte River Corridor Alliance
971
By: (Lodner A Seiles
Title: CONDINATION
Title: CORDINATIK
Designated Contact Person: RODNEY VERHOEFF
· ·
Mailing Address: PO Box 8358 Lincoln, NE 6850
Telephone Number: (402) 476-2729
I exclusive transver

This Amendment "1" to the Interlocal Cooperation Act Agreement for the Lower Platte River Cumulative Impact Study is executed by the United States Geological Survey on this 26th day of July, 2005.

United States Geological Survey

By: Robert B. Swanson

Title: Director, USGS Nebraska Water Science Center

Designated Contact Person:

Ronald B. Zelt

Mailing Address:

5231 South 19th, Lincoln, NE 68512-1271

Telephone Number:

(402) 328-4100

This Amendment "1" to the Interlocal Cooperation Act Agreement for the Lower Platte River Cumulative Impact Study is executed by the Untied States Fish & Wildlife Service on this _/8_day of __August_____, 2005.

United States Fish & Wildlife Service

By: Liven

Title: Nebraska Field Supervisor

Designated Contact Person:

Jeff Runge

U.S. Fishand Wildlife Service

Federal Building, Second Floor

Mailing Address: 203 West 2nd Street

Grand Island, NE 63801

Telephone Number:

308-382-6468 ext. 22

IN WITNESS WHEREOF,

Telephone Number:

	Lincoln V	Water Systems				
		The second second				
	By:			e e e e e e e e e e e e e e e e e e e	 ·	
	Title:					
						-
signated Contact	Person:		•			
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iling Address:	•					

which will require 60% non-federal matching funds.

Therefore, it is agreed by the Funding Partners listed above, to provide the non-federal matching fund requirements on specified segments of the Lower Platte Cumulative Impact Study Phase 2 - Data Acquisition & Information System Development and the Hydrological Analysis and Discrete-Vertical Data portion of the Study.

- 1. Purpose: The purpose of Addendum B is to outline the Funding Partner's financial commitments toward matching the U.S. Army Corps of Engineer's and U.S. Geological Survey's federal funds for Data Acquisition & Information System Development for the Lower Platte River Cumulative Impact Study Phase 2 as outlined in the "Lower Platte Cumulative Impact Study Scope of Work for Phase 2-June 2005" and the "Hydrologic Analysis of Daily Discharge and Discrete-Vertical Data from Historical Measurements at Lower Platte River Gaging Stations Pre-proposal-June 26, 2005", both attached hereto (Attachment 1 & Attachment 2) and incorporated herein by reference. Data to be acquired includes digitizing aerial photographs and transect information from six time steps starting with the most recent data set and continuing backward in the following order as funding allows: Data Set 2003; Data Set 1993; Data Sets 1970's Data Sets, 1950's Data Sets, 1938, and 1850's Transect Data Sets.
- 2. <u>Costs:</u> The maximum amount of \$105,000 non-federal cash and \$20,000 non-federal in-kind contributions from the Contributing Funding Partners will be as follows:

	$\underline{\operatorname{Cash}}$	<u>In-Kind</u>
Lower Platte North Natural Resources Di	strict \$15	,000
	\$4,000	
Lower Platte South Natural Resources Di	strict \$ 15,000	\$4,000
Papio-Missouri River NRD	\$ 15,000	\$4,000
Nebraska Game and Parks Commission	\$ 15,000	\$4,000
Nebraska Department of Roads (NDOR)	\$ 15,000	\$4,000
Metropolitan Utilities District (MUD)	\$ 15,000	\$0
Lincoln Water Systems (LWS)	<u>\$ 15,000</u>	<u>\$0</u>
F	Totals: \$10	5.000

\$20,000

It is the intent of the Funding Partners to obtain separate grant funding (i.e. the Nebraska Environmental Trust etc.) for any additional non-federal funds required for other Phase 2 expenses not addressed by Addendum B. Addendum B only obligates the above Funding Partners for the amounts listed. It is understood that any additional non-federal obligations for Data Acquisition & Information System Development for the

This Addendum B to the Interlocal Cooperation Act Agreement for the Lower Platte River Cumulative Impact Study is executed by the Lower Platte North Natural Resources District on this 3 day of 4 vgv57, 2005.
Lower Platte North Natural Resources District By: Unit Tohannes
Title: Chairman
Designated Contact Person: Tom Mount ford
Mailing Address: Box 126 Wahoo WE 68066
Telephone Number: 402 - 443 - 4675

This Addendum B to the Interlocal Cooperation Act Agreement for the Lower Platte River Cumulative Impact Study is executed by the Nebraska Game and Parks Commission on this 25th day of ______, 2005.

Nebraska Game and Parks Commission

By: 5/1 & grelian

Title: ASS+ Dir.

Designated Contact Person: Frank Albrecht

Mailing Address:

1300 N 332 St POBOX 30370 Lincoln, NE 68503

Telephone Number:

402-471-5422

This Addendum B to the Interlocal Cooperation Act Agreement for the Lower Platte River Cumulative Impact Study is executed by the Nebraska Department of Roads on this 22 day of 2005.

Nebraska Department of Roads

Title: Planning & Project Lovelopnort Engineer

Designated Contact Person:_

ART YNKEP

Mailing Address:

P.O. BOX 94137

Telephone Number:

402-479-4795

IN WITNESS W	HEREOF,	•			
This Addendum I	3 is executed l , 2005.	by Lincoln Wat	er Systems o	on this	day of
	Lincoln W	ater Systems			
	Ву:	NAME IN .			
y.	Title:				
Designated Contac	ct Person:	-			
Mailing Address:					

Telephone Number:

Lower Platte Cumulative Study Phase 2 Scope of Work June 24, 2005

Introduction

The Lower Platte River Corridor is a unique area in eastern Nebraska with a wealth of resources. The corridor supports exceptional biodiversity and is important for a multitude of reasons such as providing habitat for the endangered pallid sturgeon, least tern, and threatened piping plover, as well as a variety of other fish and wildlife species. It stretches nearly 110 river miles from Columbus to the mouth of the Platte River near Plattsmouth and serves as one of the few remaining contiguous natural corridors in the eastern part of Nebraska. The area includes all or portions of 8 counties and 24 communities and provides drinking water to nearly 50% of the state's population. The natural resources of the area, inherent beauty, proximity to large metropolitan centers, good transportation, numerous recreation and tourist destinations, and desirability for residential and commercial development ALL provide the setting for unprecedented growth and development both now and into the future.

The Cumulative Impacts Study (CIS) project, a geographically-based project, seeks to manage and protect the unique and valuable Lower Platte River Corridor ecosystem by collecting and organizing the necessary data and information to evaluate ecosystem and land use changes over time. Future phases of this project will look at developing predictive models and tools for evaluating/predicting the impacts of future activities and projects. To do this, geospatial analysis methods will be employed to assess long-term ecosystem changes and determine the risk and impacts associated with individual large-scale infrastructure and development projects, as well as the combined effect of the many activities in the Lower Platte River Corridor.

The CIS project is multi-faceted in nature, focusing on the interaction of the land, water, and biological communities, and how changes have shaped the ecosystem of the Lower Platte River Corridor. This proposal has the support of, and is coordinated with, federal, state, and local agencies as well as NGO's in an attempt to provide a regional framework to understand and evaluate the impact of growth, land use, and habitat changes in the river corridor, while protecting the ecological integrity of the area.

To undertake this task, the Cumulative Impacts Study Working Group was created through a cooperative agreement signed in September of 2003 between the U.S. Army Corps of Engineers and the Nebraska Game and Parks Commission. An interlocal agreement was formed between the NGPC and participants in the study including NDOR, 3 NRDs - LPNNRD, LPSNRD, PMRNRD, DNR (although they are member of LPRCA). Other partners who have joined since then include LPRCA, Nebraska Land Trust, USGS, USF&WS, CALMIT, and UNL. The group has held a series of meetings designed to clarify the goals and parameters of the study.

Theme of Study

The overall questions to be answered are: What are the changes over time in infrastructure, land use, and water issues/hydrology? AND How do each of these affect or are affected by: the River, the Floodplain, and the Bluffs Corridor? After considerable discussion and many

Data Time Steps & Aerial Photography

Datasets will be acquired for the following time steps -1850s, 1938, 1950s, 1970s, 1993, and 2003. Datasets for these time steps were selected by the group based upon which year or years had either accurate mapping or clear aerial photography available for the project area. To best study this area, digital ortho photography will be rendered in 1-meter resolution.

Purpose of Study

Study of the parameters identified above and their associated datasets for each of the five identified time steps will provide the basis for evaluating and analyzing past and present changes to the Lower Platte River Corridor ecosystem. This study will also provide the foundation for future research and analytical studies through the creation of a Geographic Information System (GIS) accessible via the internet. This would help resource agencies identify past and current conditions and changes along this corridor. There are some questions we hope to address including:

What do the datasets tell us?
What are the trends?
Can we predict future changes based on trend analysis?

Project Description & Timetable

The Cumulative Impact Study project will be implemented in three phases: (1) Scoping; (2) Data Acquisition, Information System Development; and Progress Report; and (3) Development of Predictive Models/Tools.

- → PHASE 1 Scoping Current phase. Determination of goals, objectives, and outcomes for the project. Also, further refinement of data needs and costs. Completion of scoping by July 2005.
- → PHASE 2 Data Acquisition, Information System Development, Trend Analysis, and Progress Report Acquire datasets for specified time steps. Create database(s) and GIS and make available online for use by partners. A basic trend analysis will be tabulated and included in the progress report. The progress report will present the information gathered in Phase 2, in a manner accessible to the general public.
 - 1850's Dataset Will require acquisition of transect data, organization of information, addition to database(s) and GIS, and coordination with UNO.
 - 1938 Dataset Will need to acquire including any missing pieces, digitize, rectify, and classify. UNK has 9 x 9 aerials that can be scanned.
 - 1950s Dataset Will need to digitize, rectify, and classify.
 - 1970s Dataset Will need to digitize, rectify, and classify.
 - 1993 Dataset Should be readily accessible and already rectified. Would need to be digitized and classified. Matter of acquisition and organization of data.
 - **2003 Dataset** Should be readily accessible and already rectified. Would need to be digitized and classified. Matter of acquisition and organization of data.

Other Costs

•	Data Input - In addition to these costs, the LPNNRD cost estimate included two
	additional subjects, not included as part of the Scope of Work. They are as follows:

	Sub. All Contingency – 4%	429,106.00 17,164.00
	Subtotal	243,386.00
•	Contracting Division costs	<u>3,000.00</u>
•	Development of Contracts	15,000.00
•	Progress Report	15,000.00
	Project Management - Corps Project Mgmt Costs (5%)	21,386.00
•	Digitizing of 1971 Aerials	50,000.00
•	Digitizing of 1950s Aerials	50,000.00
•	Digitizing of 1938 Aerials – UNK estimate	50,000.00
•	Data Extraction for 1850s Transect Data	30,000.00
	-IMS Development/deployment – 300 hours	6,000.00
	-Reprojecting and clipping data – 150 hours	\$ 3,000.00
	additional subjects, not included as part of the Scope of Work.	. They are as follo

Grand Total	\$447,000.00
Minus USGS segment	-112,000.00
_	335,000.00

Proposed Corps Match

Proposed USGS Match

Federal – 50%	167,500	Federal – 40%	44,800
Non-Federal – 50%	167,500	Non-Fed – 60%	67,200

✓ <u>PHASE 3</u> — We will need to re-evaluate Phase 3 once we have completed Phase 2 to determine needs and subsequently costs.